

Accounting for Listening: How music streaming has changed what it means to listen

Introduction

The IFPI¹ reported total digital revenues overtook physical sales for the first time in 2015, enabling the record industry to post 3.2% year on year global revenue growth figures. (IFPI, 2016) Whilst interrogation of these figures paints a less optimistic picture, what is clear is that "The streaming market is without doubt entering a phase of accelerating growth." (Mulligan, 2016) Compared to selling records as a unit, in offering subscribed access to a digital service, audio streaming constitutes an innovation in how recorded music is sold, purchased and used. As Christensen observes, "Disruptive technologies bring to market a very different value proposition than had been available previously." (2013, loc.187) In particular, the methodologies for curating (Atton, 2014, p.424) the personalised playlist (Bonnin and Jannach, 2014, p. 26:2) has become a key battle ground between competing streaming services. As Morris and Powers observe, "Where many of the services offer the same catalogues of musical content, the affective cues and features for discovering and encountering music become the main point of differentiation." (2015, p.12) Given streaming's rise to prominence (Ritcher, 2016a & 2016b) and suspected eventual market dominance, Fliether "urges us to ask whether our ability to be affected by music may actually be weakened by the need to choose every piece of music for ourselves." (2015, p.266) Clearly then, research on how streaming music impacts upon existing listening choices and practices is topical. Therefore, I conducted some semi-structured empirical research with students as to what, how, when and why they were listening to recorded² music.

The first section of the paper summarises the history of music listening and meaning. The next section considers theories and research by various scholars to discuss recent debates on digitisation's effect on music use, listening and

¹ International Federation of Phonographic Industries is the trade body for 1300 record companies worldwide.

² Obviously, listening to music occurs in multiple live and public performance contexts; however, this research was limited to listening to recorded music.

attention. The third section outlines the relationship between user control and listening engagement.³ The fourth section covers the empirical research conducted with musicians. The final six sections situate the survey findings within the wider literature on attention, formats and streaming. Each section explores how the level of control participants exert over the situation, playback source and type of playlist, defines a distinct listening position (prescriptive, decisive, impactive, immersive, narrative and conversive). The conclusion argues the innovation of music streaming's playlist profiling, where it is not music that is collected but the user's subjectivity, has irrevocably changed what it means to listen to music.

Longstanding Debates on the Meaning of Listening

In 'On Popular Music' (1941), musicologist Theodore Adorno establishes the position that commoditised forms of music are purposely distractive, the use of popular music is mainly as a form of distraction and the majority of music listening is distracted. Building upon this argument, in 1962 Adorno proposed the first typology of listening. He characterised eight types of music listener that ranged from the 'expert' to the 'indifferent'. According to Adorno serious and good listeners engage in structured listening to the complex meaning within the music, whereas the majority of listeners, which make up the other six types, are "Distracted from the demands of reality by entertainment which does not demand their attention either." (Adorno et al, 2002 p.458) In discussing the growth in significance of forms of musical reception due to the rise of broadcast media in the mid to late 20th century, Helmut Rösing further developed Adorno's reasoning. Rösing argued, "Transmitted music is in great part everyday music...where the preferred corresponding form of listening behaviour is inattentive, unconcentrated listening." (1984, p.123) Despite his pessimistic view of popular music, in outlining the 'triadic determinant model' of musical reception (1984, p.135) Rösing identifies the key considerations for researching music listening: "(1) Factors concerning the product; (2) the situation of the

³ For the purposes of this research, I will use a variety of terms to describe sources of playback and playlists. References to devices will mean iPods, record players, smartphones, etc. Formats will mean CD, vinyl, MP3, etc. Platforms will refer directly to digital music services, whereas services will broadly refer to streaming platforms and broadcast media combined.

person listening to the product; and (3) the person himself, with his individual characteristics and features." (1984, p.137)

In contrast to Rösing's notion that transmitted music is listened to incidentally (1984, p.147), music theorist Ola Stockfelt (1997) argued for the importance of idle but active listeners. His theory of genre-normative modes of listening proposes, "Daily listening is often more conditioned by the situation in which one meets the music than by the music itself." (2004 p.89) Cognitive musicologist David Huron went further than Stockfelt and identified specific listening modes on a spectrum between idle and active listening. Huron defined a listening mode as "A distinctive attitude or approach that can be brought to bear on a listening experience." (2002, online) His research identified twenty-one different modes and emphasised the importance of developing a deeper understanding of the conscious and unconscious structures that underlie musical perception.

Alternatively, in countering the prevailing determinant and cognitive theories, sociologist Tia DeNora framed music as an everyday cultural resource, asserting individuals use music to construct meaning and identity not only from how they "Experience culture, but also how they mobilize culture for being, doing and feeling." (2000, p.74) In developing DeNora's ideas on individual reception, musicologist Eric Clarke argues music affords certain types of collective interpretation.

A listener's sense of meaning in music is powerfully bound up with his or her experience of being subjectively engaged (or alienated) by the music, and with the varieties of subjective states that music can afford. (2005, p89-90)

DeNora and Clarke's arguments epitomised a shift in research emphasis toward how meaningful the listening is. In 1998 music psychologist John Sloboda had posed the rhetorical question: "Does music mean anything?" (1998, p.28) His answer argued for, despite its limitations, the continued use of analogies from linguistics as a way to articulate the dynamic relationship between the syntax of music's structure and the semantics of its lived experience. In exploring the semantics of lived experience, linguist Richard Lanham argues, "The manner of the attention changes the object." (2006, p.164). Lanham's sketching of an

attention economy firstly redefines references to text, image and sound as signals of information. He then argues,

Signals of all sorts bring with them their own suggestions [...] about where they might be placed on a spectrum of formal self-consciousness. But we can choose [...] to ignore these indications and bring a different kind of attention to the experience. (2006, p.162)

Lanham seems to go further than most music theorists in emphasising the free will of the receiver to operate outside of the previously prescribed constraints of the signal and situation. He proposes in an economics of attention capital lies in the cultural conversation. (Lanham, 2006, p.9) For Lanham, music is a signal that triggers a spectrum of sub, semi and/or self-conscious responses expressed by individuals and groups. The reactions of the receivers mobilise culture, as DeNora (2000) has argued, but for Lanham it is the aggregate value of the culture mobilised that has equally, if not more, a significant role in defining what music means.

Seven decades after Adorno decried popular music as largely valueless distraction, Lanham pictures a world where the conversation about music creates and re-creates musical meaning. The foresight in Adorno (1941) and Rösing's (1984) work attempted to counter such ideas. They argued the repetitiveness of popular music's structure and play on mass media made it recognisable, acceptable and talked about, which is why it is so distractive. Therefore, the longstanding debates about listening operate on a spectrum, between autonomously interpreting complex meaning within certain music to valuing the aggregated expressions of the meaning made from all music. As Herbert summarised,

The single most commonly described everyday listening experience is one characterised by a distributed and fluctuating attention that may privilege different components of this situation at different times. (2011, p.81)

Early 21st century research has sought to address the distribution and fluctuations of attention within the realities of limitless and easy access to music brought about by digitisation. The next section addresses these debates.

Paying Attention to Recent Readings of Listening, Attention and Control

Whereas historic debates have considered the power of music to be distractive, recent research has been more concerned with how music has become less attractive. Economic geographer Andrew Leyshon asserts that 'Popular music no longer commands the attention of consumers in the manner that it perhaps once did.' (2014, p.87) Similarly, ethnomusicologist Anahid Kassabian has argued music users now operate a ubiquitous mode of listening, where, "we listen "alongside," or simultaneous with, other activities." (2013, p.9) Kassabian views everyday music use as distributed subjectivity:

A non individual subjectivity, a field, but a field over which power is distributed unevenly and unpredictably, over which differences are not only possible but required, and across which information flows, leading to affective responses. (Kassabian, 2013, p.xxv)

However, as sociologist Raphael Nowak observes, there is a clear distinction in the affective value of music on users between the music they choose to listen to and the environmental music that 'comes into their ears'. (2016, p.72). Moreover, concurring with Rösing (1984), Yang and Teng found in choosing music, "Both the short-term contextual factors and the long-term music preference are important." (2015, p.14:27) As Shuker has previously observed, "Taste is shaped by nostalgia and personal memory." (2010, p.107) Nowak theorises individual music taste as an "Assemblage of preferences, social connotations, material engagements with technologies, and the roles assigned to music." (2016, p.125) Studies by Yang and Teng, (2015, p.14:18) and Krause et al. (2015, p.167) support Nowak's notion that the greater the amount of autonomy a music user has to express their taste the more satisfying the listening experience. Kamalzadeh et al's research goes as far as to suggest, "The overall desire for control is higher than what a conventional recommender system or radio station can provide." (2016, p.59)

Therefore, as Kassabian asserts, "What is important, theoretically, is to notice the range of listening – from attentive to distracted and everything around and in between." (2013, p.72) The problem with noticing a range of listening is that listening is difficult to notice. As cultural theorist and sociologist Simon Frith observed, "You can see people listening but not hear their listening." (2015) The challenge then, is to observe how music users, operating within a field of distributed subjectivity, distribute attention between situations and music signals to structure their listening to meaningfully mobilise culture to fit their taste.

Observations on Taking Control of Listening

As Herbert has observed, "Unsurprisingly, listening experiences in public places, or in the company of others, are likely to involve a low level of choice." (2011, p.12) However, as Michael Bull has theorised, personal portable music devices have enabled "Users to construct meaningful and pleasurable narratives out of the routine linear and cyclical practices of their everyday movement." (Bull, 2005, 346) Individuals exert care and control (Atton, 2014, p.424) by choosing the social settings, devices, formats and services they use for music playback and the methodologies they employ in selecting, structuring and modifying the music playlist.

Research by Krause et al listed seventeen different playback options with the most prominently used, "The radio, mobile MP3 players, and computers." (2015, p.162) Bonnin and Jannach broadly define a sequence of tracks as a playlist (2014, p.26:3). They define six distinct types of playlist⁴ as do Kamalzadeh et al. (2016, p.47). Essentially, the playlists divide into four categories based upon levels of user control:

1. Broadcast radio, club, synch and corporate playlists are situation driven and controlled by DJs, producers and marketers, not users.

⁴ Bonnin and Jannach (2014, p.26:2-3) identified six playlists: 1. Broadcast radio playlists, 2. Personalised radio playlists, 3. Amateur playlists, 4. Club playlists, 5. Album tracklists, and 6. Compilation tracklists. Kamalzadeh et al. (2016, p.53) also identified six playlists: 1. Song after song, 2. Artist, album or genre, 3. Playlist or folder, 4. Shuffle on collection, 5. online recommendation, and 6. Radio.

2. Album and compilation playlists require the user to locate the pre-sequenced collection of tracks searching by act, album title or a theme, such as greatest hits, genre or context.
3. Pre-prepared, song after song and shuffle playlists afford decreasing autonomy of music choice to the user.
4. Personalised playlists are "Very different from broadcasting radio playlists because the listeners directly interact with the service and playlists can be adapted to the preferences of the listeners."
(Bonnin and Jannach, 2014, p. 26:2)

Therefore, the personalised playlist typifies the innovation of streaming platforms to structure listening. By equating distinct situational, playback and playlist choices with certain listening positions, it may be feasible to explore what different kinds of attention an individual user brings to listening and explore if music streaming has affected what it means to listen.

Asking Musicians about Music Use

In 2014, Juslin and Isaksson (2014, p.192) established a good deal of commonality in the reasons expressed for music choices between psychology and music students. Given these findings, and considering musicians' general enhanced awareness of music technologies, I had sixty BA honours music students observe and record their own music use for one week in October 2015.

Students presented their findings to me and a seminar group of seven fellow students. During each presentation, I noted which devices, formats and services the participant used, how and why they used them, which music genres they listened to and the situations where they listened. A ten-minute audio-recorded group discussion followed each set of presentations, which I opened with the same question: "What have you learned from the process of observing your own listening?" I then facilitated voluntary contributions from participants as to the similarities and differences in their music use. I also facilitated through follow up questions, observations and opinions of the various technologies and methodologies they employed. After completing the task, forty-five students voluntarily agreed to be participants in the research. Amongst the participants

there was an even gender balance, ages ranged from nineteen to twenty-seven, and although all participants currently reside in the UK, the group represented a range of nationalities. Having listened to the discussions and matched individual comments with their presentation data, I then anonymised all the participants. Finally, I identified key themes across the survey and selected comments from individual participants that summarised broad opinions.

I recognise there are numerous empirical constraints to my methodological approach. Issues as to the accuracy of self-reporting and my own subjective reading of the data pose potential problems for the impartiality and validity of the research. Likewise, musicians have professional as well as personal motivations for music use, are predisposed toward choosing music based upon intrinsic criteria (Juslin and Isaksson 2014) and are likely to have a broader taste palette. (Rösing, 1984, p.145) Furthermore, whilst I recognise gender, race, class and cultural difference could be factors in the participants' abilities to access music in certain ways, the analysis does not explicitly address these issues. This was exploratory research designed to provide an overview and some direction as to where further research on musical and media practices, circulations and interactions could focus. The following sections present and discuss the findings.

Reporting Back on Playback

Quantitatively participants used a variety of methods for playback. With regard to devices, the vast majority used both computers and smart phones. However, for the convenience of off-line listening around 10% of the group still used iPods. As for using a range of different services or formats, 20% of participants reported using just one playback source for music. 48% used two, 25% three, with only 7% using four or more. The table below represents the percentage of participants who used that source at least once in the week. Therefore, a participant who used Spotify Freemium, YouTube and CD counts in the total for each category.

Playback Source	Total % of at least one use
Spotify Premium - monthly paid for unlimited service	33%
Spotify Freemium - free version with limited functionality & adverts	35%
Youtube – free video streaming service	44%
iTunes – repository for ripped and purchased audio files	37%
Soundcloud / Bandcamp - Free streaming platforms	25%
Vinyl – LP format	13%
Radio - Broadcast and online	8%
CD – Album format	4%
Shazam ⁵ - phone app music recognition software	2%

Kamalzadeh et al's (2016, p.54) 2012 "Survey showed the popularity of online music services to be rather low," but the results presented in the above table allude to the growth of streaming, with a combined 68% using Spotify's two subscription tiers. The balance of use across playback sources is consistent with 2016 record industry sales trends. (BPI, 2016 & Ritcher, 2016b) However, only four participants reported listening to radio, which conflicts with Krause et al's (2015, p.162) majority use finding. This could be credited to the demographic (McIntyre, 2016) but the discussion uncovered that many participants failed to notice these aspects of their listening. Just one participant reported using Shazam, but many more recalled using it in the discussion. These oversights could be due to how I framed the task, but comments from participants allude to the ubiquity of listening Kassabian (2013) theorises. Interestingly, although Apple Music⁶, Napster, Tidal⁷ and Deezer account for significant global audio streaming use (Ritcher, 2016c), none of the participants used these platforms. Therefore, the group is not fully representative of the global market. However,

⁵ Although Shazam is not actually a listening platform, its use to identify tracks listened to provides a good indication of shifts in listening position.

⁶ At the time of the survey, Apple Music had only been operational for three months, although it was interesting that by that point not a single participant had used the three-month free trial of the platform.

⁷ Some of the Norwegian participants had previously used WiMP which was the name of Tidal before it was acquired by Jay-Z

as Mulligan (2016b) recognises, these results may be predictive of an emerging trend toward Spotify and Apple dominating the market.

Due to the open-ended design of the research playlist reporting was much more difficult to quantify. Moreover, although analysis of the quantitative data opens up areas of discussion, it is the reasons given for the choices of use that offers most insight. The remainder of the article will consider how the participants individually and collectively structured their listening. It will outline six distinct listening positions that emerged from the self-reporting and discussions. These positions are identified by the level of actual control the music user exercises over the situation and source of their music listening. Whilst the research will then relate the level of control to the level of attention paid by users, this proposed taxonomy of positions is distinct from Huron's (2002) listening modes, as Huron's modes describe a specific cognitive listening state and its associated physical representations. As will be demonstrated, one listening position can incorporate a range of listening modes within it. Furthermore, whilst each listening position is defined as a distinct static state, the reality of the user's experience is that the shifts in attention between positions occur as fluid and fragmented (Stockfelt, 1997) transformations in consciousness (Herbert, 2001). I begin with the prescriptive listening position as it is structured by the situation.

A Prescription for Listening

Prescriptive listening is a subconsciously attentive position that recognises the affective value of music as a form of "comfortable distraction." (Adorno cited in Paddison, 2011, p. 212) In prescriptive listening positions a music user's control is limited to only being able to turn off or change the signal, like selecting between channels on broadcast media, or changing social situation. A clear example of prescriptive listening was, "I didn't class listening to radio as listening to music." This comment summed up the amount of 'forgetting' (Sloboda et al, 2001, p.24) most participants recognised during the discussion, exemplifying for these participants' radio operates as environmental music. (Nowak, 2016 p.72) The experience is consistent with Huron's definition of distracted listening, "Where the listener pays no conscious attention whatsoever to the music." (Huron, 2002)

Despite this apparent lack of attention, As Kahneman states, "The often used phrase 'pay attention' is apt: You dispose of a limited budget of attention that you can allocate to activities, and if you try to go beyond your budget, you will fail." (2011, p.23) Kahneman's observation of the subliminal diminishing effect of using music alongside complex cognitive tasks is evident in research on memory by Furnham and Strbac (2002) and driving by Salvucci et al (2007). Therefore, although mood change (Sloboda, 2015) is the most common use for music, prescriptive listening affords very limited options to set the mood required, the situation still conditions the listening more than the music. (Stockfelt, 1997) However, in accepting prescriptive listening as a starting point for the range of listening, it is then feasible to question how listeners move out of the position.

Deciding to Pay Attention to Listening

Decisive listening is the moment when the user mobilises music. (DeNora, 2000, p.74) It is the pivotal listening position when the listener identifies with familiar or unfamiliar music already present in the environment. With prescriptive listening, conscious attention focuses on the non-musical situation or activity. Yet the fluidity of listening (Stockfelt 1997) produces unprompted meaningful conscious effects where the focus of attention becomes the music not the situation. As Klingberg explains, "When there is just one object [...] there is no need for attention; it is the amount of competing information to which our brains are exposed that impels a choice." (2009, p.28) Davenport & Beck define attention as "focused mental engagement on a particular item of information. Items come into our awareness, we attend to a particular item, and then we decide whether to act." (2001, p.20) Decisive listening then, punctuates prescriptive listening by acknowledging fragments of attention that raises affect from a circuit of bodily responses beyond conscious comprehension (Kassabian 2013, p.xiii) to play a role in the receivers' consciousness. (Franck, 1999 & 2015)

Decisive listening contains several of the modes of listening defined by Huron (2002). Examples include connecting with emotions of past events, attending to

the meaning of lyrics, to mentally sing-along or to use music as “motivation” rather than “contemplation” by moving in time. Each of Huron’s modes demonstrates a decision to act to usually already familiar music. The choice almost instantaneously changes how the user structures their listening to produce conscious, but easily forgotten, responses that don’t usually have an enduring subjective impact. However, one of the core experiences expressed by almost all the participants was the moment they heard music and had to know what it was. This experience describes impactive listening, which is the next position.

Assessing the Impact of Listening

Impactive listening describes the shift in attention from a decisive position, to one where the act of identifying and sourcing the track renders the music sufficiently meaningful for potential future engagement. Whilst music can bubble up from the subconscious, what psychologists call episodic memory, to actually use music again the listener has to be able to access it. The fact numerous participants stated, “Shazam doesn't occur to me as something that I'm using,” illustrates the often instantaneous and unrecalled motion through consciousness toward impactive listening, where participants actively capture and digitally store the title of the track without remembering the act of doing it.

Impactive listening defines the unpredictability of music’s ineffable interaction (Herbert, 2011, p.37) with consciousness and the chance for the user to be affected. More commonly, the ebb and flow between decisive and impactive listening mirrors the cultural conversation (Lanham, 2006) that drives it. The participants recalled word of mouth recommendations and a multitude of word of mouse interactions as drivers of impactive listening. As one participant observed, “The problem is too much choice, we need friends, bloggers, playlists and journalists to help us find our way through all the music.” Both Schwartz (2005) and Mulligan (2015) acknowledge the paradox of choice the participant identifies as consumer problem. Therefore, considering how and why participants chose to identify, store and retrieve music is an instructive place to observe impactive listening.

After being impacted by an unfamiliar track, half of the participants acquired and stored recordings, with 37% using iTunes for their music collections. The rest used vinyl or CD. In these instances, iTunes participants were consistent with Kibby's observations on MP3 use. "Their collection was not defined as the music currently being played, but as the music owned." (2011, p.437) For those who did not use iTunes, the majority stored playlists within streaming platforms. For Marshall this approach is not as substantial. He argues, "The combination of subject and object characteristic of collecting is not possible in this cloud context." (2014, p.10) However, as Hagen has observed,

The playlist enables ownership of music even in streaming services because it undermines or narrows the impact of the service's shared features and content in the interests of elevating personal music selection above all else. (2014, p.643)

Apart from collecting music experienced during decisive listening or peer or press recommendation, in contrast to Kamalzadeh et al's research that reported a "Low desire for new songs," (2016, p.56) participants deliberately sought impactive listening by actively endeavouring to discover new music. They perceived YouTube as the default platform to find all music, with channels such as Majestic Casual and Needle Drop used for discovery. Likewise, Soundcloud was considered good for discovering non-mainstream and underground genres of music (see Allington, Jordaneous and Dueck 2015). Of the seventeen participants who used iTunes, only two also paid for Spotify premium. The rest used a combination of the free platforms for discovery. A key point here is that although these participants are still prepared to pay to own music, they expect the platforms for discovering new music to be free to access.

For the majority 68% that use Spotify, discovery happened through playing compilation playlists such as "Walking Like a Badass", "New Music Friday" and especially the personalised playlist offered on Spotify's discover weekly function. Most significantly, many participants shared the view summarized by the following comment: "If it doesn't grab me in the first minute then I move on." This snap judgement is a feature of how digital platforms are used. Spotify's own research shows "The chance that a song is skipped before it ends is a whopping

48.6%.” (Lamere, 2014) Even though all the music skipped is not newly discovered, this statistic suggests most discovered music struggles to make an impact. As one participant observed, “I’m really into discovery, I’m constantly looking for new things that I don’t revisit a lot.” Although an extreme example, it epitomises the distinctiveness of the impactful listening position.

The flippant search for impact through music discovery on digital platforms would have been almost impossible to execute in the analogue era. The limited playback functionality of analogue formats made building playlists cumbersome and the high economic cost of a poor purchasing choice would have rendered skip listening futile and expensive. The limitless choice and ease of control of first MP3 and now streaming platforms has removed any risk of a poor choice. However, as Marshall argues when comparing the paucity of the experience of streaming music to that of physical formats, “There is no time for desire, and no time (or need) for labour. Think of a song, play it instantly. But when everything is equally available, rarity as a form of distinction disappears.” (2014, p.11) Certainly, for some of the participants there is agreement with Marshall’s protest, as they have the desire and make the time to listen immersively.

The Rarity of Immersive Listening

Immersive listening is where the listener autonomously controls the situation, playback source and playlist choice and is focused on listening as the sole activity: “I can’t listen to music on the go, on little headphones; I need to be sat down listening to it in its purest form.” Furthermore, an exclusive Spotify premium user stated, “Music’s a piece of art and so the best way to listen to that band right now is to listen to how they’ve put that album together.” Immersive listening often respectfully concedes control of the playlist to the creators of the music. Furthermore, immersive listening is usually an individual experience, or one that is shared by a few people in a private domestic setting. This enables as much control over the music’s sonic quality, to afford serious listening (Adorno, 2002). Although, as the two following comments illustrate, opinions of sonic quality are relative. “If I’m spending money it’s for the sound quality, that’s why I went to a premium quality bit rate on Spotify.” Whereas a vinyl using

participant stated, "I question the value of £5⁸ a month on Spotify, but when I know I'm getting a physical product, I'm happy to spend £34 on two new vinyl." The last comment represents the view of many of the participants, not just the vinyl users, that using vinyl dictated that listening became the purpose of the activity, facilitating an immersive listening position. As Nowak observes, "The vinyl disc supposes a different type of engagement." (2016, p.125) Nowak's observation is evident in this participant's comment: "Vinyl is a very intimate experience...it's a listening event." This distinction between the analogue and digital experience is encapsulated by Bartmanski and Woodward:

Vinyl as a commodity materialises paradoxical cultural values. Ironically, its fragility and proneness to damage is reinterpreted as a strength endowed with human qualities, compared to digital formats which are endlessly reproducible and deletable at a keyboard stroke. (2015, p.22)

The 13% of participants who bought and played vinyl appeared to operate a format value hierarchy. (Hogan, 2015) "Vinyl is for the music that deserves a physical presence in my house," is one comment that represented the vinyl enthusiasts' feeling. However, as Clarke has observed, "The conditions for autonomous listening seem to be vanishingly rare." (2005, p.144) The research bore out Clarke's observation, the majority of the participants reported listening ubiquitously (Kassabian, 2013), alongside other activities. The same options digitisation affords music discovery have opened up how music users impose their playlist preference on most situations. As Bull has observed, "Mobile technologies such as iPods not only become digitalized urban sherpas for many users, they become personalised repositories for a subject's narrative." (2009, p.92) How the participants use digital technologies to impose their musical narratives on situations is the next distinct listening position displayed.

The Story of Narrative Listening

Whereas prescriptive listening pays no conscious attention to music, decisive listening is usually fleeting and momentary and impactive listening is about

⁸ Student premium monthly subscription fee

discovery, the narrative listening position seeks a meaningful listening experience, where listening is not the primary activity. Unlike immersive listening, it is not a conscious pursuit of meaning in the music itself, but an audio narrative to fit the listener's situation. A comment that met with wide agreement was: "I control the playlist and like to know what I'm listening to next." Kamalzadeh et al. propose for music choice, "Mood can perhaps be even more important than genre." (2016, p.53) Spotify's own playlist analysis supports this assertion. In 2015, forty-one of the top one hundred playlists were named by context, compared to seventeen by genre. (Lamere, 2015b) Likewise, Sloboda et al found "Mood change is significantly greater for episodes where participants exercise high choice over the music they hear." (2001, p.23) Moreover, Krause et al. (2015) found listeners using their own devices felt more engaged. Therefore, narrative listening occurs when the listener prepares and modifies the playlist to relive music stored during impactive listening or by selecting playlists to enhance the subjective control over situations. However, this does not mean that music users are fully attentive. As Sloboda et al. assert, music listening is rarely the main thing anyone is doing (2001, p.18) and people can easily multitask whilst listening to music. (Bilton, 2010, p.220) However, comments such as, "I've realised I'm not very good at silence," and "I don't like being with my own thoughts," illustrate the mood managing value of narrative listening and chime with Bull's observation that commuters use iPods to create "A form of accompanied solitude." (2005, 353)

Where a user is playing unfamiliar music interspersed between familiar music, like with a contextual playlist, evidently there can be fluid interchange between decisive, impactive and narrative listening. Participants selected music as soundtracks to travel, cook, study, and exercise to and would often listen whilst using social media. Despite the significance of context, music selection by genre remained important to narrative listening, especially at specific times in the day. Many used soul, pop or folk to start their day and jazz, classical or singer-songwriter to wind down at night. The narrative listening position is the self, but largely sub-conscious, pursuit of the story the listener wants to tell them self. However, more and more, users are conceding control of the narrative to algorithmically generated playlists delivered by streaming platforms designed to fit the user's previously defined taste. As Hagen has observed of these

personalised playlists, "User participation enables listeners to become content producers of contexts and structures for their music consumption." (2015, p.635) The analysis therefore concludes by exploring where the narrative a user requests becomes a filter for future recommendation for listening. This relatively new conversive listening position considers the innovation of the personalised playlist and its effect on what it means to listen.

Innovations in Conversive Listening

The Free Dictionary defines Conversive as, "1. Capable of being converted or changed 2. Ready to converse; social." Conversive seems an apt term to define the type of listening that happens on streaming platforms. As Anderson explains,

The user's interactions are recorded, and their relationship to data and these systems reconfigure both the data and the data's position within databases to continually generate new relationships between data and users. (2014, p.24)

Whereas with impactive listening the cultural conversation (Lanham 2006, p.9) is actually expressed, essentially on streaming platforms, the act of listening engages the user in a silent cultural conversation. Conversive listening reflects the nowness (Berry, 2011cites Spivak 2009 p.144) of a user's subjectivity, where they have conceded the privacy of off-line listening to "A real time, flowing, dynamic, stream of information," (Borthwick, 2009) that contains their moment by moment expressions of taste. However, Seaver expresses concern: "As corporations turn their data mining attention to context, they have the power to impose and normalise certain modes of contextualization at the expense of others." (2015, p.1105) What was interesting was the lack of awareness amongst the participants as to how personalised playlists were constructed. "Discover weekly, that's really cool, but I didn't realise they're doing that," commented one participant. The "doing that" referred to is the "Ecosystem devoted to capturing user interactions and feeding them back into systems dedicated to optimising user experiences." (Anderson, 2014, p.16) Arguably, a lack of user awareness as to why the music they deliver in personalised playlists appears "really cool" is advantageous to the platforms. Marshall (2015) has

already expressed concern as to the cosiness of the relationship between record labels and platforms to maximise user taste data for marketing and promotion. More than simply being part of a field of distributed subjectivity, streaming platforms distribute subjectivity.

Certainly, "Streaming has both reorganized media distribution and created new disorder." (Vonderau, 2015, p.730) Until streaming's innovation of the personalised playlist, the repositories for a subject's narrative (Bull, 2009, p.92) were constructed by the user from music they had identified, captured and stored out of their own impactive listening. The most unpredictable narrative a user could use was the shuffle function. Part of the disorder then, is users conceding control of their playlist to the source of the playback. Historically, this is the function of radio, which, as demonstrated here, usually delivers inattentive, unconcentrated, active distraction (Adorno 2002 & Rösing, 1984) in prescriptive and decisive listening positions. Arguably, streaming platforms through personalised playlists are pseudo-individualising the sense of control by "Endowing cultural mass production with the halo of free choice." (Adorno, 2002, p.455) Conversely, as demonstrated in this research, play doesn't equate to listening and as Lanham (2006) argues users can choose the kind of attention they pay. Either way, in encouraging users to concede playlist control, streaming platforms are looking to reverse the longstanding logic reiterated in this research that increased user autonomy equates with higher levels of engagement. Therefore, to rephrase Fliether's (2015, p.266) question from the introduction, do the affective cues that drive conversive listening strengthen the effect of music on the user?

This initial survey suggests half to two thirds of participants are yet to be convinced as to the value of paying to discover music, declare their listening data or concede their record collection to the cloud. For those that do predominantly stream, comments such as, "I realised I'm so stereotypical," and, "I thought I listened to much more music than I do," summarised participants' own observations of the dissonance between their self-perceptions of use and taste and their actual listening. The ramifications of this narrative conflict, when the platform's account seems inconsistent with the user's own account of their listening, poses, as yet unresolved, problems of perception. Moreover, it is

possible the platforms are overplaying the need for discovery. As one participant's Mum commented to them during a long shared car journey, "I'm tired of listening to things I don't know." It seems most music users agree, with the UK charts (Ingham, 2016) bearing out what Anita Elberse previously recognised about iTunes: "Social influence is a powerful force in markets for popular culture. Because we are social beings, people tend to want to listen to the same music that others listen to." (2014, loc 1073) The cultural conversation (Lanham, 2006) seemingly remains more potent when expressed than when silent.

This disorder streaming has created is a curious situation, were music users apparently want more control (Kamalzadeh et al, 2016, p.59) to listen to the same music as everyone else. At this juncture, the long-term cultural mobilising (DeNora, 2000) ramifications of algorithmic music recommendations are as unpredictable as a personalised playlist's content. Balancing the promise of the personal with the need for the popular is the challenge music streaming services face. To succeed, they will need to convince many more music users of the virtues and value of conversive listening.

Conclusion

This research explored what kinds of attention music users bring to the experience of listening to recorded music in a market increasingly dominated by online streaming services. The empirical research conducted with forty-five participants identified that users adopt six core listening positions, as they negotiate their listening across a field of distributed subjectivity. (Kassabian, 2013) Each position represents a distinct subjective state that depends on the music user's level of control over the situation, playback source and playlist. These proposed positions are not as definitive as modes of listening, (Huron, 2002) but what they seek to do is explore how observing situational and signal control can imply conscious listening effects.

Whereas prescriptive, decisive, impactive, narrative and immersive, are all subjective listening positions music users adopted in the analogue era of recorded music, conversive listening fluidly blends the other positions into a new

and distinctive feature of using music on streaming platforms. Irrelevant of the user's actual listening position, the music played on the platform engages the user in a constant silent conversation as to their taste, context and purpose for listening. Here each track a user plays makes the service more attentive to user needs and desires. (Anderson, 2014, p.16) By capturing listening difference and algorithmically removing unpredictability, music streaming platforms are banking on the fact they can deliver increasingly affective responses to music. In complete contrast to Leyshon's (2014) concern, conversive listening means attention is more valued and valuable than ever. However, in re-distributing the listeners' subjectivity back to them through personalised and compilation playlists, there is the potential for narrative conflict between the user's perception of their taste and the actual taste profile stored on the service. Despite its present promise, uncertainty remains if the innovation of algorithmic profiling will result in popular music, once again, commanding the attention it perhaps once did. However, what is certain is that conversive listening has already irrevocably changed the meaning made from music and what it means to listen.

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